

# C-MISUMI VALUE [Standard] X-Axis Cross Roller

Points on Similar Product Comparison | Travel Accuracy (Straightness) 30µm Parallelism 30µm

Similar Product Pages P1918

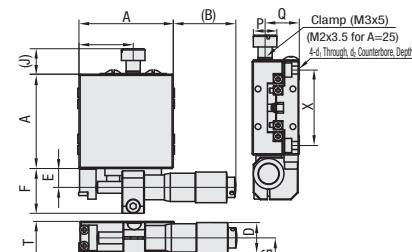
■ Features: Economical stages with a micrometer head capable of 0.01mm resolution adjustments. Micrometer head position is selectable for X-Axis stages.

**X-Axis**



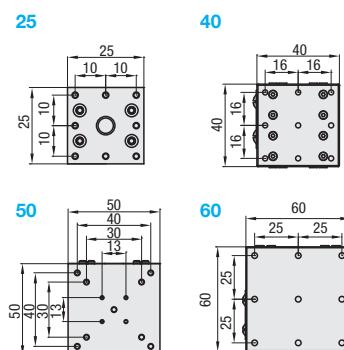
XY-Axis P1942  
Z-Axis P1967  
RoHS10

**XCRS**



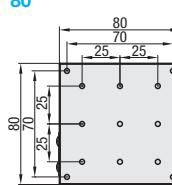
Clamp (M3x5)  
(M2x3.5 for A=25)  
 $\varnothing$  d1 Through & Counterbore, Depth 1

• Mounting Hole Dimensions of the Top Table

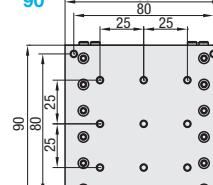


25 40  
50 60  
80 90 100 110 120

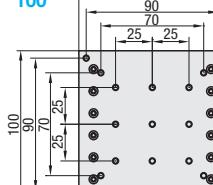
80, 90, 100, 120 have different plate side shapes. See CAD data for details.



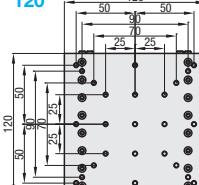
80  
A25 has a different feed bracket configuration.  
See the CAD data for details.



90  
A40



100  
A50



120  
A60  
A120 micrometer tip shape is different

M Material: Aluminum Alloy  
S Surface Treatment: Black Anodize

Part Number		Top View			Front View			Side View								
TYPE	A	(B)	Travel Distance (mm)	(mm)	E	F	(J)	D	G	T	P	Q	X	d1	d2	ℓ
<b>XCRS</b>	<b>25</b>	29	$\pm 3.2$		7	11.8	(6.8)	9.5	9.3	15	6	10.5	20	2.4	4.2	2.5
	<b>40</b>	26			8	19	(10.8)	13	13	20	10	14.5	32	3.4	6	3.3
	<b>50</b>	23		$\pm 6.5$	8	19	(10.8)	13	13	20	10	14.5	40	3.4	6	3.5
	<b>60</b>	21			8	19	(10.8)	13	13	20	10	14.5	50	4.5	8	4.4
	<b>80</b>	22			8	19	(10.8)	13	13	20	10	14.5	70	4.5	8	4.4
	<b>90</b>	34.8		$\pm 12.5$	8	19	(10.8)	13	13	20	10	14.5	80	4.5	8	5.3
	<b>100</b>	20.8			8	19	(10.8)	13	13	20	10	14.5	90	4.5	8	5.3
	<b>120</b>	88		$\pm 25$	13.5	26	(10.8)	19.1	11	20	10	14.5	100	4.5	8	5.3

• Performance

A	Stage Surface (mm)	Load Capacity (N)		Max. Holding Force (N) (Ref.)	Travel Accuracy		Allowable Moment (N-cm)		Moment Rigidity (°/N-cm)		Parallelism	Weight (kg)	Unit Price	
		Horizontal	Vertical		Straightness	Motion Parallelism	Pitching	Yawing	Rolling	Pitching	Yawing			
<b>XCRS</b>	25x 25	9.8	4.9	60	30µm	30µm	1.1	0.8	0.4	3.03	2.85	1.80	50µm	0.04
	40x 40	19.6	9.8				2.7	2.2	2.0	0.38	0.42	0.28		0.14
	50x 50	29.4	14.7				3.5	3.0	3.3	0.20	0.22	0.12		0.18
	60x 60	49	19.6				5.2	4.3	5.5	0.12	0.11	0.07		0.24
	80x 80	98					19.2	15.1	17.3	0.05	0.05	0.04	60µm	0.39
	90x 90	117.6					25.0	20.0	22.0	0.05	0.05	0.04		0.49
<b>100</b>	100x100	147					36.0	30.0	33.0	0.06	0.07	0.05		0.58
	120x120	196					57.2	44.7	66.7	0.03	0.02	0.01		0.95

• Max. Holding Force (Ref.) will vary depending on the tightening torque variations. Ensure adequate safety margins for design.

• Micrometer Head Resolution: 10µm/division

Ordering Example: Model (Type, A) XCRS60

Alterations Part Number - (CR, A...etc.)  
XCRS40 - CR  
XCRS60 - AR

Alterations	Micrometer Head Position					
	Spec.	Side Mount - Right/Left Reversed	Center	Center Mount, Right/Left Reversed	Center Mount, Top/Bottom Reversed	Center Mount, Right/Left & Top/Bottom Reversed
	Code	CR	A	AR	AZ	AZR

• Notes on Vertical Use of X-Axis Stages

• The carriage may drop if mounted vertically with the micrometer head pointed down with Standard, CR, A or AR selected. (A load exceeding the spring pull force will cause the carriage to drop.)

• The carriage does not drop when mounted vertically with the micrometer head pointed down with AZ or AZR selected. However, do not apply a load exceeding the specified vertical load capacity for X-Axis as it may decrease the accuracy.